

UPDATE

February 4, 2011

Preparedness and Planning

Medical Countermeasures for Large-Scale Biological Attacks

Following a large-scale biological attack, the rapid delivery of effective medical countermeasures to the affected population is vital for saving lives and preserving the public's confidence in the federal government's ability to respond effectively. The Department of Health and Human Services launched the Cities Readiness Initiative (CRI) in 2004. The CRI objective is to prepare major U.S. Cities and metropolitan areas to respond effectively to large-scale biological attacks by, among other

things, dispensing antibiotics to the targeted population within 48 hours. However, despite more than five years of federal funding and support, few if any CRI jurisdictions can meet this 48-hour goal.



Public Health Use and Distribution of Antivirals

The National Association of City and County Health Officials (NACCHO) published <u>a report</u> from a think tank meeting on local health department antiviral distribution

for public health. A group of 14 public health professionals discussed ways to strengthen the role of local health departments in antiviral distribution for pandemic influenza in the following ways: validating current LHD perspectives, knowledge, and experiences around antivirals, and attitudes and practices for influenza treatment and prophylaxis; developing a shared vision for the optimal roles and expectations of LHDs in guiding and managing antiviral use and distribution; and identifying actions to strengthen the role of LHDs in guiding and managing antiviral use and distribution.

Pentagon Funds Work on Faster Countermeasure Development

The U.S. Defense Department has awarded \$5.6 million for work toward a capability to develop disease treatments within one week. The project could ultimately yield countermeasures useful in responding to known, unknown, naturally occurring or engineered disease-causing pathogens. The work would focus on the quick adoption of broadly neutralizing phage antibodies that could be employed directly to ward off microbial infection, according to the release.

Disaster Preparedness Tool Calculates Casualty Estimates

To plan effective training scenarios and tabletop exercises, first responders need a simple way to estimate realistic casualty figures as a result of catastrophic events. The Electronic Mass Casualty Assessment and Planning Scenarios (EMCAPS) was created by the Johns Hopkins

News

Vaccine Safety Interview - Peter Sandman

A three-part interview with risk communication expert Peter M. Sandman that discusses public skepticism about vaccination safety is available online. Part One discusses the kinds of vaccination audiences. Part Two discusses vaccination/autism controversies. Part Three includes different messaging for different audiences and why "good guys" mislead more.

Amber Alerts on Facebook

The Amber Alert system, which is used to notify transportation officials and the public on recently abducted children through the Emergency Alert System, will now be available on Facebook. Facebook has created 53 new Amber Alert pages for each of the 50 states, the District of Columbia, Puerto Rico and the U.S. Virgin Islands.

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University Office of Critical Event Preparedness and Response and the Johns Hopkins University Applied Physics Laboratory.

State-level Radiation Emergency Preparedness and Response Capabilities

On October 6, the Council on State and Territorial Epidemiologists conducted a <u>detailed assessment</u> of radiation planning and preparedness in state public health departments. The majority of states had a written radiation response plan, and most plans include a detailed section for communications issues during a radiation emergency. More than half of the states indicated that their relationship with federal partners is sufficient to provide resources for



radiation emergencies, indicating the importance states placed on federal resources and expertise. Specific recommendations arising from this report include dissemination of best practices related to radiation response, greater incorporation of radiation preparedness as a priority under an all-hazards approach, increased training and coordination opportunities for states with federal partners and experts, and strategic planning for activities designed to provide collaboration between all types of CDC radiation preparedness personnel and states.

PPE for Healthcare Personnel 2010

The Institute of Medicine (IOM) published <u>a report</u> on the use of personal protective equipment (PPE) by hospital staff for influenza and other respiratory diseases. These recommendations stem from questions of PPE use during the 2009 pandemic influenza H1N1 outbreak. The IOM recommends a four-pronged strategy for the use of PPE: deliberate planning and preparation at the leadership and organizational levels; comprehensive training for all personnel, including supervisors and managers; widespread and convenient availability of appropriate PPE devices; and accountability at all levels of the organization.

Exercise Series Is an Opportunity to Assess Neighborhood Preparedness

This series of web-based tabletop exercises will take place between January to June 2011 in the Formidable Footprint exercises. These national exercises will simulate a series of natural disasters including an earthquake, flooding, wildfires, tornadoes, a flu pandemic and a hurricane. The exercises are a training opportunity for neighborhood based groups for disaster response and planning, including: Citizen Corps, Community Emergency Response Teams, faith-based organizations, Map Your Neighborhood Teams, neighborhood associations, neighborhood emergency response teams and Neighborhood Watches. Currently groups from 38 states have registered to participate.

New Registration Initiative for CERT Programs and Citizen Corps Councils

The Federal Emergency Management Agency (FEMA) has two improved <u>online</u> <u>registries</u> that will help capture the community readiness efforts of local

Community Emergency Response Team (CERT) Programs and Citizen Corps Councils. FEMA is asking all new and pre-existing local CERT Programs to register on the National CERT or Citizen Corps websites. This effort will recognize the tremendous work accomplished to date and serve as a baseline for future individual and community preparedness and resiliency projects.



Surveillance

Highly Pathogenic H5N1 Hits Japan

An epidemic of highly pathogenic <u>avian influenza</u> is spreading among chickens. In December 2010, two poultry farms in Miyazaki Prefecture disposed of about 420,000 birds. Also during that month, about 20,000 infected chickens were destroyed in Shimane Prefecture. To monitor the outbreak, please visit the World Health Organization's Western Pacific Region's webpage.

Communications

CDC Publishes Social Media Metrics on Dashboard

Officials at the Centers for Disease Control and Prevention have put their social media metrics online to show patterns such as spikes in YouTube views and growth in Twitter followers. For example, CDC had a sharp increase in YouTube views at the start of the influenza outbreak in April 2009 and counts more than 1 million Twitter followers and 57,000 Facebook friends. Those are just some of the social media metrics CDC has published online as part of its new eHealth Metrics Dashboard.

New Report on Disaster Communications

For all its tragic devastation, last year's earthquake in Haiti may have had one silver lining, according to a <u>new report</u> from the non-profit Knight Foundation. It appears that the disaster ushered in a new culture in disaster relief, employing Web 2.0 technologies to speed response and mitigation. Every modern disaster has required modes of communication, but in Haiti, the importance of the media rose to a new level.



Integrated Public Warning System Progresses

Few topics in emergency management have received more attention over the past few years than public alerts and warnings. The Integrated Public Alert and Warning System (IPAWS) program launched in 2006 in response to Presidential Executive Order 13407, which required that the U.S. have "an effective, reliable, integrated, flexible and comprehensive system to alert and warn the American people in situations of war, terrorist attack, natural disaster or other hazards to public safety and well-being." Published timelines for these IPAWS initiatives are optimistic but potentially realistic. As of September 30, a 180-day clock started for broadcasters to transition their old analog Emergency Alerting System to digital ones. Full implementation of new stations is targeted for the third or fourth quarter of 2011.

Social Media + Emergency Management: Talking with Tech Leaders on the West Coast

Social media, text messaging, and the many other technologies and tools available have definitely impacted emergency management. FEMA Administrator Craig Fugate talked about this in a meeting recently with Craig Newmark, founder of Craigslist, and editors from Wired Magazine, Twitter, Apple, and Facebook. They discussed social media, technology, emergency management, and ways to assist the public in getting prepared, by using the tools they use on a daily basis. Administrator Fugate posted a blog with details of the meeting and a short video.

National Public Health Radio Network

The National Public Health Radio Network (NPHRN) is a collaborative initiative between the Centers for Disease Control and Prevention's (CDC) Office of Public Health Preparedness and Response and the Division of Emergency Operations. Utilizing specific frequencies within the High Frequency spectrum, the NPHRN provides a wireless redundant communications capacity. When participating in the NPHRN, CDC and public health partners will have the capability to transmit and receive vital information in the event that traditional infrastructure dependent communication media (telephone, internet, cellular) are damaged, overloaded, or destroyed thus preventing effective and reliable communication.

CDC Officials Share Key Pandemic Communications Lessons

On January 27, Dr. Richard Besser and Dr. Anne Schuchat, along with other panel members, shared <u>communication lessons</u> learned from the H1N1 pandemic at the Infectious Diseases Society of America conference. They described the difficulties in describing the severity of a new pandemic to policymakers and the public, and the importance of consistent communications to various audiences.

Pandemic Planning

European Health Officials' Gauge Influenza/H1N1 Risk

The 2010/11 seasonal influenza epidemics in Europe are dominated so far by the A(H1N1)2009 viruses which emerged in the 2009 pandemic, although these are now considered seasonal viruses. There are also some B viruses circulating. Both are causing some severe disease and premature deaths but the <u>preliminary data</u> indicate that 90% of the fatalities are due to A(H1N1)2009. The scientific evidence to date provides justification for the following countermeasures already adopted by some countries in addition to the usual influenza personal protective measures (early self isolation, respiratory hygiene and hand-washing):

- Continued vaccination of all those recommended for vaccination following national guidelines but especially clinical risk groups, including pregnant women, as it seems that the vaccine provides some protection even just a week after injection. However, there may be vaccine availability, logistical and administrative issues that will make this difficult in some settings.
- Use of antiviral treatment in those presenting with severe influenza-like illness, pending virological confirmation, and in those with risk factors with milder disease.
- Alerting higher level healthcare services of potential increased numbers of influenza patients this winter, potentially already in the next few weeks.
- Advising clinicians to be vigilant to the possibility of severe illness due to bacterial co-infection with influenza, including invasive group A streptococcal, pneumococcal and meningococcal infection, and to be aware of the possibility of such bacterial co-infection in people with flu-like illness.
- Use or creation of clinical networks for surveillance, evaluation and sharing
 of clinical experience. This is an interim risk assessment and will be updated at intervals as more data and analyses emerge.

Pandemic (H1N1) 2009 Virus Reassortment

Researchers in Emerging Infectious Diseases studied how the reassortment of 2009 pandemic influenza H1N1 with currently circulating seasonal influenza viruses would affect the pathogenicity. The authors performed the reassortment in vitro and inoculated ferrets with the surviving viruses. The <u>research showed</u>

that the reassorted viruses had increased pathogenicity compared to each virus on its own.

Pathogenesis of the 1918 Pandemic Influenza Virus

Researchers in *PLoS Pathogens* discuss new insight into the pathogenicity of the 1918 pandemic influenza. The first influenza pandemic of the 21st century was caused by a novel swine-origin H1N1 influenza virus that emerged in early 2009. This virus is substantially less virulent than the 1918 influenza virus, but it has the potential to acquire amino acid changes in its viral proteins that would increase its pathogenicity. To prepare for such events and future pandemics, we need to understand the molecular basis of the high-virulence phenotype of the 1918 pandemic virus to help identify virulence factors in other emerging pandemic viruses. Additionally, the fact that more than 97% of the people infected with the 1918 virus survived raises the intriguing possibility of some contribution of host genetics to the consequences of influenza (i.e., survival or death). Thus, it is also important to explore host factors that are involved in resistance or susceptibility to influenza virus infection. Such information could accelerate the development of new antiviral drugs for prophylaxis and treatment, which are urgently needed given the obstacles to rapid development of an effective vaccine against pandemic influenza.

Plasma Treatment Reduced Mortality in H1N1 Patients

In *Clinical Infectious Diseases*, researchers studied the effectiveness of convalescent plasma therapy for treatment of severe cases of 2009 pandemic influenza H1N1. They conducted a prospective cohort study between September 1, 2009 and June 30, 2010 with 93 adult patients with severe 2009 pandemic influenza H1N1 infection enrolled. The <u>research showed</u> that those who were treated with convalescent plasma therapy had significantly lower mortality that the untreated group.

Other News

Studies Support Reactive Cholera Vaccination

Against the backdrop of the ongoing cholera epidemic in Haiti, two studies released yesterday suggest that cholera vaccination campaigns launched in response to outbreaks can be worthwhile. In a small case-control study conducted during an outbreak in Vietnam in 2008, vaccination was found to be 76% effective, according to one of the two reports published by PLoS Neglected Tropical Diseases. In the second study, researchers estimated that a rapid mass vaccination drive could have prevented up to 40% of the cases

and deaths in a major cholera epidemic in Zimbabwe in 2008-09, assuming half of the population had been covered and the vaccine was highly effective. Until recently, the conventional wisdom has been that response to cholera outbreaks should focus on providing rehydration therapy, clean water, and sanitation, because the disease spreads quickly and cholera vaccines were expensive, required multiple doses, and provided limited protection. But last year,



as noted in an editorial accompanying the two studies, the World Health Organization (WHO) advised that <u>"reactive" cholera vaccination</u> could be considered, in light of improving vaccines. However, the WHO cautioned that data supporting that approach are scarce.

Snyder Proposes Open-Source Economic Development Model

On January 20, Michigan governor Rick Synder spoke in Kalamazoo, stating that he wants to use an 'open-source economic development model' to help repair the battered-down state. He said the state is going to look at every region and see which area is the best at a certain practice and ask if the community is willing to share it with the rest of the state.

Training & Education

Date/Time	Event	Location
Feb. 10, 2011 4pm	FEMA REGION VII Webinar: An Overview of Functional Needs Support Services Join FEMA Region VII for an informative one-hour overview of Functional Needs Support Services (FNSS) in General Population Shelters. This webinar and conference call will introduce planning guidance that can be incorporated into existing shelter plans to meet access and functional needs in general population shelters.	webinar
Feb. 15, 2011 2pm	EMAC: A Basic Understanding and Use of the System by Public Health & Medical Professionals This one-hour webinar focuses on basic information that all health and medical personnel need to know about the Emergency Management Assistance Compact (EMAC) and the relationship of mission-ready packages (MRPs) to the EMAC operations system. The session includes discussion of the five phases of the EMAC system and covers such topics as: recommended actions for preparing for deployment, developing response capabilities into MRPs, requesting and providing assistance, what to expect when deploying, and reimbursement. Space is limited. Reserve your webinar seat now.	Webinar
Feb. 19, 2011	Accessing Health Care Coverage & Services for MI-Child Training This workshop is for people who serve as "support parents" to fellow parents of children with special needs. Support parents will be able to identify types of public health care coverage available, apply for benefits online, list services available to children and families with hereditary disorders, get information on accessing coverage for mental health services, and become familiar with social security programs for young people. CEUs are available. Cost: \$10-\$15. Click here for more information, including registration information.	The ARC Dearborn 27325 West Warren Dearborn, MI 48127 (313) 562-0219 Additional Dates: Mar 5 - Muskegon, MI Apr 9 - Lawrence, MI Apr 30 - Petoskey, MI



Date/Time	Event	Location
Feb. 22, 2011 8am	Pediatric Disaster Management Conference The conference, sponsored by Michigan's Region 6 and the DeVos Children's Hospital, objectives include: recognize that all pediatric age groups must be considered in all aspects of disaster preparedness; identify that children in disaster situations are a vulnerable population, related to their unique needs developmentally, physiologically and emotionally and pediatric health care providers have a responsibility in meeting needs of children of all ages in disaster preparedness; link regional hospital health care providers with community and regional responders in pediatric disaster preparedness; and recognize that children of all ages need attention when disaster plans are written and exercised, equipment and supplies are purchased and disaster response and recovery efforts are activated.	Holiday Inn Ferris State University 1005 Perry Avenue Big Rapids, MI 49307
Feb. 22, 2011	2011 Public Health Preparedness Summit The release of the National Health Security Strategy late last year and the companion Biennial Implementation Plan present significant public health preparedness initiatives that have implications at all levels of government and the private sector. The Summit will provide an opportunity for attendees to better understand the goals and objectives of these two plans and provide feedback to national leaders to further inform the future development of these initiatives.	Atlanta, GA
Feb. 23, 2011 11am	FEMA REGION VII Webinar: An Overview of Functional Needs Support Services Join FEMA Region VII for an informative one-hour overview of Functional Needs Support Services (FNSS) in General Population Shelters. This webinar and conference call will introduce planning guidance that can be incorporated into existing shelter plans to meet access and functional needs in general population shelters.	webinar
Feb. 24, 2011 3pm	Emergency Preparedness for Farmers, Ranchers and other Rural Residents with Disabilities People with disabilities are vulnerable to disasters and farmers/ranchers, family members, and other rural residents with disabilities are no exception. Join the National AgrAbility Project for a free webinar that explores emergency preparedness for this population group. The webinar will cover the development of emergency preparedness plans and support networks, sheltering, fire emergencies, mental health issues in emergencies, and more.	webinar
Mar. 4, 2011	Is Your Teen Ready for Adult Life? This workshop is for families of teens (or professionals who serve them) with special health care needs, receiving mental health services, or who have a disability. Information and practical suggestions will be shared for helping teens prepare to transition from high school to employment, high school to higher education, home to independent living, and/or from child to adult community services. CEUs are available. Cost: \$10-\$15. Click here for more information, including registration information.	Ionia, MI Additional MI Locations: Mar. 24 - Ann Arbor Apr. 28 - Alpena Apr. 29 - Sault Ste. Marie

Date/Time	Event	Location
Mar. 14, 2011 3pm	FEMA REGION VII Webinar: An Overview of Functional Needs Support Services Join FEMA Region VII for an informative one-hour overview of Functional Needs Support Services (FNSS) in General Population Shelters. This webinar and conference call will introduce planning guidance that can be incorporated into existing shelter plans to meet access and functional needs in general population shelters.	webinar
Mar. 21, 2011	Public Health and Radiation Emergency Preparedness This conference provides state and local health officials and their partners with the tools necessary to develop and implement response and recovery plans related to mass casualty radiation events. Visit the conference website for more information.	Atlanta, GA
Apr. 1, 2011	Michigan Epidemiology Conference This year's conference will feature a keynote address by Dr. Eric Noji, called by some the Father of Disaster Epidemiology. Dr. Noji is a Senior Associate Professor of Epidemiology; Chairman & CEO of Noji Global Health & Security LLC. He will be speaking on the epidemiological aspects of disaster relief and preparedness. Additional details, once available, will be posted on the Michigan Public Health Association website.	University of Michigan School of Public Health Crossroads Building Ann Arbor, MI
Apr. 3, 2011	E-Beam and X-Ray Irradiation Technologies The National Center for Electron Beam Research (NCEBR) serves as an unbiased venue for academic, government, and industry scientists to carry out strategic electronic pasteurization and sterilization research and commercial projects using E-beam and X-rays. To address the needs of the food, phytosanitary, agribusiness, and pharmaceutical industries the NCEBR is organizing a week-long hands-on workshop in E-Beam and X-ray technologies in April 2011.	400 Discover Drive College Station, TX 77845
Apr. 11, 2011	2011 Emergency Preparedness Solutions for Long Term Care Conference Both federal and state laws require skilled, licensed long term care facilities to have a written disaster plan. This conference will provide attendees with resources, templates, personal experiences and lessons learned from prior disaster experiences, while allowing time for networking with partners in emergency preparedness. This conference is open to Michigan long term care administrators, directors of nursing, social work directors, safety/emergency preparedness officers, and surveyors. Please note there is a limit of two representatives per facility. There is no fee for attending this conference. For more information, including registration details, please visit the MI-TRAIN website and search for course ID#: 1025029.	Suburban Collection Showplace Novi, MI
May 2, 2011	Supporting Youth into Healthy Productive Adulthood This workshop is for individuals working with young people in faith-based organizations, schools, and youth groups in Wayne County. Participants will explore ways to give parents/ caregivers, teachers, and others working with children the tools they need to make responsible decisions. CUEs are available. Cost: \$10-\$15. Click here for more information, including registration information.	Detroit, MI Additional MI Locations: May 7 - Detroit

Date/Time	Event	Location
May 3, 2011	Great Lakes Homeland Security Training Conference & Expo This annual conference brings together more than 1,200 attendees from a variety of disciplines including law enforcement, fire, public health and health care, school administration, emergency management, and the private sector.	Grand Rapids, MI
May 5, 2011	Great Lakes Border Health Initiative Conference Save the date for this important international conference. As more information becomes available, it will be posted on Michigan's border health webpage.	Niagara Falls, NY
May 25, 2011	Communicable Disease Conference This conference seeks to provide the latest knowledge on communicable disease diagnosis, surveillance, reporting, laboratory test interpretation, and incorporation of epidemiologic principals. The target audience includes communicable disease nurses, epidemiologists, medical officers, health officers, infection control professionals, environmental health specialists, physicians, or any other health professional interested in communicable diseases.	Doubletree Hotel Bay City, MI









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